



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,909	03/31/2004	Ronald W. Korzun	136483-1	2908
23413	7590	10/21/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EDGAR, RICHARD A	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

e

Office Action Summary	Application No. 10/708,909	Applicant(s) KORZUN ET AL.	
	Examiner Richard Edgar	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/31/04 & 8/24/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

The words "portion portions" appear together throughout the specification, including the claims (see Abstract, line 6; paragraph 26, lines 13-14, and 20; paragraph 26, lines 1, 4, and 5; and claim 1, line 7). It seems that "portion" should be deleted in every instance.

In paragraph 3, line 1, "employee" should be --employ--.

In paragraph 16, line 2, "INC" should be --ICN--.

In paragraph 24, lines 2-3 "a overcover or overcover" should be --an overcover--.

In paragraph 24, line 6, "ICN'" should be --ICN's--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 10-13 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,238,368 (Ortolano hereinafter) in view of U.S. Patent No. 2,315,641 (Mosser hereinafter).

Ortolano teaches a multiple group of blades comprising: multiple blades foils 12; multiple respective cover portions 17 defining a first surface 23 configured to span tips of multiple adjacent blades between tip locations of adjacent blades thereby to form the cover portions for adjacent blades and wherein the cover portions associated with each respective adjacent blade include facing sides 18 for adjacent cover portions of adjacent blades.

Each multiple respective cover portion includes a tenon 13 extending therefrom in the overcover. The tenon 13 is peened by riveting (col. 2, line 43).

The blades further comprise a material buildup 19 on at least one facing side 18 of the cover portions, the material buildup having been machined to develop an interface between adjacent cover portions of adjacent blades (see col. 2, lines 58-65).

The material buildup is applied by a selectively mechanical or metallurgical action on both facing sides of the cover portion (col. 2, lines 59-61). The material buildup 19 is

applied between cover portions 17 on all adjacent blades thereby to effect integral covered blading (col. 2, lines 5-6).

The blades include a selectively applied underweld or underbrazed 27 between a cover portion 17 and a blade tip thereby to effectively secure the cover portion to the blade (see col. 3, lines 33-34).

The blades in the rotor are replaced in the rotor after the interface has been machined (see col. 4, lines 8-11).

Buildup 20 on the circumferential outerface of the cover and circumferential innerface of the cover is machined (see col. 2, lines 62-68).

Ortolano does not disclose an overcover coupled to a second surface opposite the first surface of the respective cover portion.

Mosser shows turbine blading with cover portions 15, whereby an overcover 16, having a thickness less than the cover portions 15 is provided for the purpose of connecting the blades 10 in groups.

Since Ortolano teaches to integrate turbine blading and Mosser teaches that an overcover 16 should be used to integrate turbine blading, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the Ortolano turbine blading arrangement so that an overcover as taught by Mosser is

applied to the rivets 13, for the purpose of integrating the turbine blading, thereby minimizing vibratory stresses.

Claims 5-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,238,368 (Ortolano hereinafter) in view of U.S. Patent No. 2,315,641 (Mosser hereinafter) as applied to claim 1 above, and further in view of U.S. Patent No. 4,575,911 (Laszlo hereinafter).

Ortolano in view of Mosser teaches the overcover being riveting by tenons onto the blade cover portions, and therefore not welded or brazed to the cover portions.

Laszlo however, teaches in col. 3, line 58 through col. 4, line 28, that in alternative to a rivet-like connection (Fig. 3), the overcover 22 may be welded to the blade cover portions 12 for the purpose of securing the blades together.

Since Ortolano in view of Mosser teach an integral blading having an overcover riveting to blade cover portions, and Laszlo expressly teaches that instead of riveting an overcover to blade covering portions, a weld should be used, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to weld the overcover to the blade covering portions, as taught by Laszlo, for the purpose of securing the blades together.

Examiner Note

The recitations “for an integral covered nozzle” and “for a turbine having multiple blades supported by a stator” have not been given patentable weight because the recitations occur in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7 am- 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar
Examiner
Art Unit 3745

RE